COMMANDERS DIGEST
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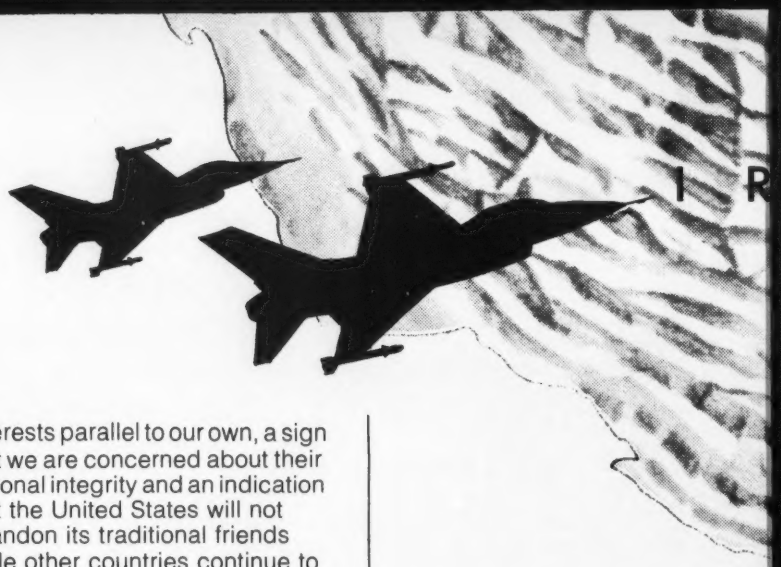
Why DoD Supports the New F-16 FIGHTER AIRCRAFT For Iranian Defense



The sale by the United States of F-16 aircraft to Iran should be viewed in the context of the continuing plans of the government of Iran to modernize its Armed Forces, the history of our relations with that country, and the important interests we have in the area.

Iran occupies a key strategic position in the Middle East controlling the air lanes from Europe to the East, has a long coastline along the Persian Gulf through which moves a large percentage of the Free World's oil supply, and has long land borders with the Soviet Union, Iraq, Turkey, Afghanistan, and Pakistan.

Iran has been developing a modern military force during the last five years. Iranian leadership intends to put Iran in a position to defend its interests with its own resources and not be forced to rely on outside assistance in a crisis unless faced with overwhelming superior forces. The F-16 will help assure that the Iranian Government retains a modern air force which will be equal to that of any other hostile regional force other than the Soviet Union in the 1980s and 1990s.

For Iranian leaders, the willingness of the United States to remain a reliable supplier of military equipment to meet the threats which they perceive to their security is extremely important. U.S. willingness in this area is evidence of our continuing interest in them as a sovereign state with important national interests parallel to our own, a sign that we are concerned about their national integrity and an indication that the United States will not abandon its traditional friends while other countries continue to arm their allies.

The strategic, political, and economic importance of the Persian Gulf countries to the United States and its Western allies is high and growing. Western Europe and Japan will remain dependent upon Gulf oil for years to come, and our own dependence upon this oil is increasing, not diminishing. From a strategic point of view, we have a clear interest in preventing the Soviet Union from exercising political, economic, or military hegemony over the area. Moreover, our commercial interests in the area run into the many billions of dollars.

"The F-16 will help assure that the Iranian Government retains a modern air force which will be equal to that of any other hostile regional force other than the Soviet Union in the 1980s and 1990s."

Iran is subject to a number of threats. Perhaps the most tangible threat to Iran concerns the vulnerability of her oil economy. If the flow of Iranian oil to the Western World were significantly reduced owing to military conflict, or the threat of military conflict, the political and economic impact would be grave.

The Soviet Union is significant, as Iran shares a long border with the Soviet Union, and most Iranians regard the Soviet Union as a potential adversary. The Iranians are also fearful of Soviet support of some of their neighbors, especially Iraq, Afghanistan, and India.

The sale of F-16s to Iran would not only strengthen U.S.-Iranian relations but also would be viewed by other countries of the region as firm evidence that the United States will maintain a steady policy in support of its friends in this critical part of the world.

In the regional context, the sale would improve Iran's ability to carry out in the latter part of the 1980s and 1990s the major security missions on which we agree: serving as a center of strength and stability in the area; withstanding Soviet designs in the region which are carried out directly or through surrogates; and joining with Saudi Arabia in providing a strong defense for the Persian Gulf area.

Other countries of the region with which we maintain close and friendly relations have not voiced any objections to this proposed sale, and we do not believe that it

Fighter Procurement Essential to Iranian Air Force Modernization

By ROBERT ELLSWORTH
Deputy Secretary of Defense

will have any adverse impact on our relations with them. We believe it could have a salutary impact, inasmuch as regional stability should be enhanced.

The Iranian F-16 procurement will not have a destabilizing effect on the Persian Gulf region. The government of Iran views this aircraft procurement as essential to its Air Force force modernization program. The Soviet Union has several bases near the Iranian border which are capable of supporting the most advanced fighter aircraft in the Soviet inventory. These bases are within fighter operational range of the major industrial and population centers of Iran. Iraq currently possesses one of the Soviet's most advanced fighter aircraft—the MIG-23, as well as the supersonic BLINDER bomber.

Three factors attenuate the relative increase in military capability occasioned by the sale of 160 F-16 aircraft to Iran. First, the addition of the F-16 is a complement to, but not a substitute for, the capabilities of the F-14/Phoenix weapon system. Consequently, it does not represent an escalation in weaponry. Secondly, the government of Iran will need replacement or attrition aircraft for the older F-5 and F-4 aircraft in the Imperial Iranian Air Force (IIAF).

The F-16 aircraft is capable of augmenting the IIAF F-14 primarily in an air defense role and, in addition, performing all the combat roles, i.e., air defense and close air support, currently performed by the IIAF F-5. Thirdly, an assessment of the increased military capability provided by the F-16 aircraft must consider the time necessary for pilots and ground crew personnel to become proficient in operating and maintaining the aircraft. The delivery of the aircraft would not have an immediate impact because of the time required to become operationally effective.

Consequently, the sale of the

ROBERT ELLSWORTH
Deputy Secretary of Defense

Robert Ellsworth of Katonah, New York, was nominated by President Gerald Ford to be Deputy Secretary of Defense on Dec. 11, 1975, confirmed by the U.S. Senate on Dec. 19, 1975, and sworn into office on Jan. 2, 1976.

When nominated, Ellsworth was serving as Assistant Secretary of Defense (International Security Affairs), a position he held since June 5, 1974.

Prior to joining the Department of Defense, Ellsworth was a general partner in Lazard Freres and Co., of New York City. From 1969 to 1971, he served as U.S. Permanent Representative on the Council of the North Atlantic Treaty Organization (NATO), with rank of Ambassador. He was national political director of the Presidential campaign in 1968. From 1961 to 1967, he served as a member of the House of Representatives from Kansas, and in Congress he was a member of the Joint Economic Committee, Veterans Affairs Committee, Post Office and Civil Service Committee and House Republican Task Force on NATO.

Ellsworth

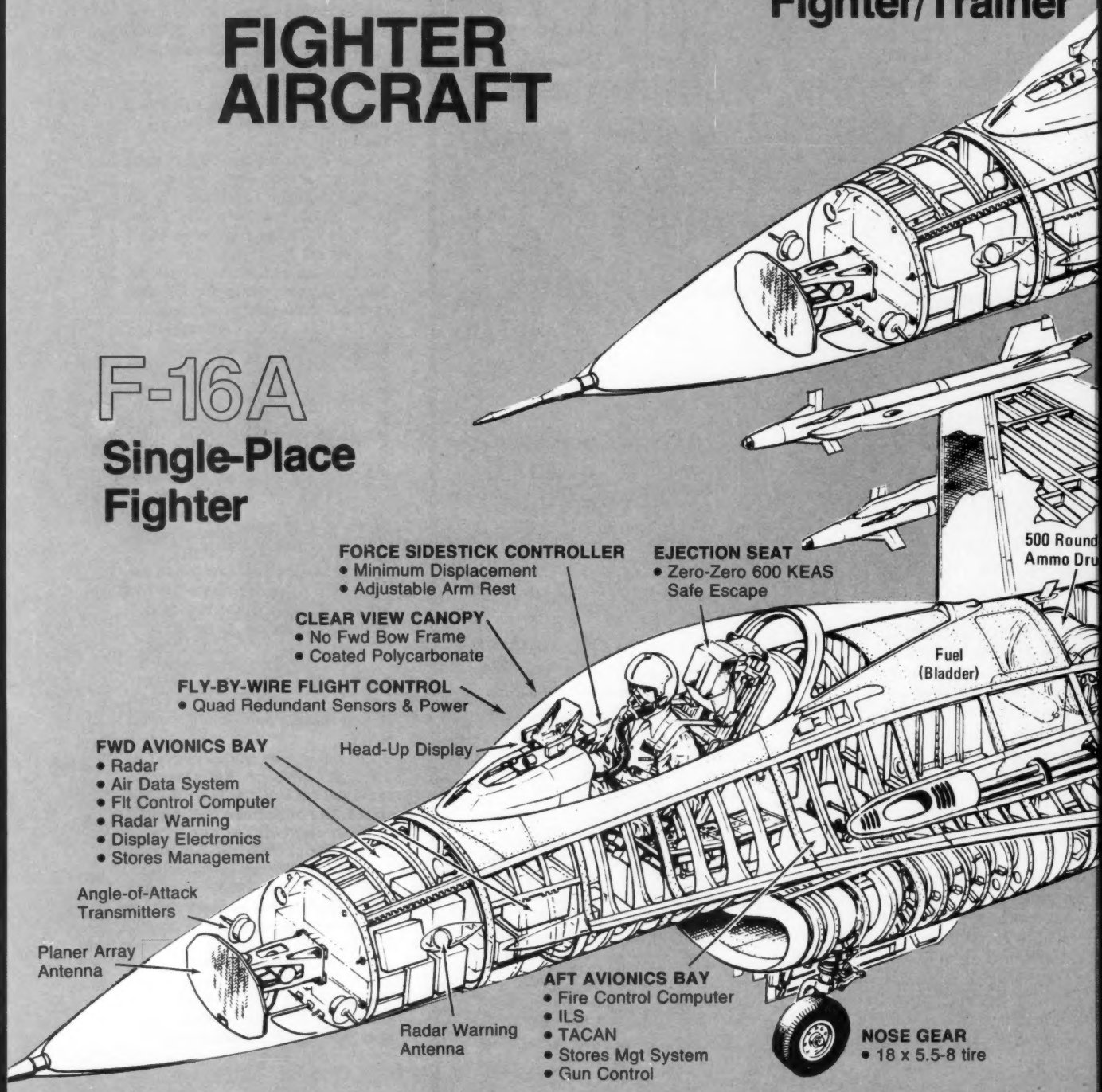
Ellsworth was born June 11, 1926, at Lawrence, Kansas, and received his B.S. degree from the University of Kansas in 1945 and his J.D. degree from the University of Michigan School of Law in 1949. From 1944 to 1946 and from 1950 to 1953, he served in the United States Navy, with the rank of lieutenant commander.

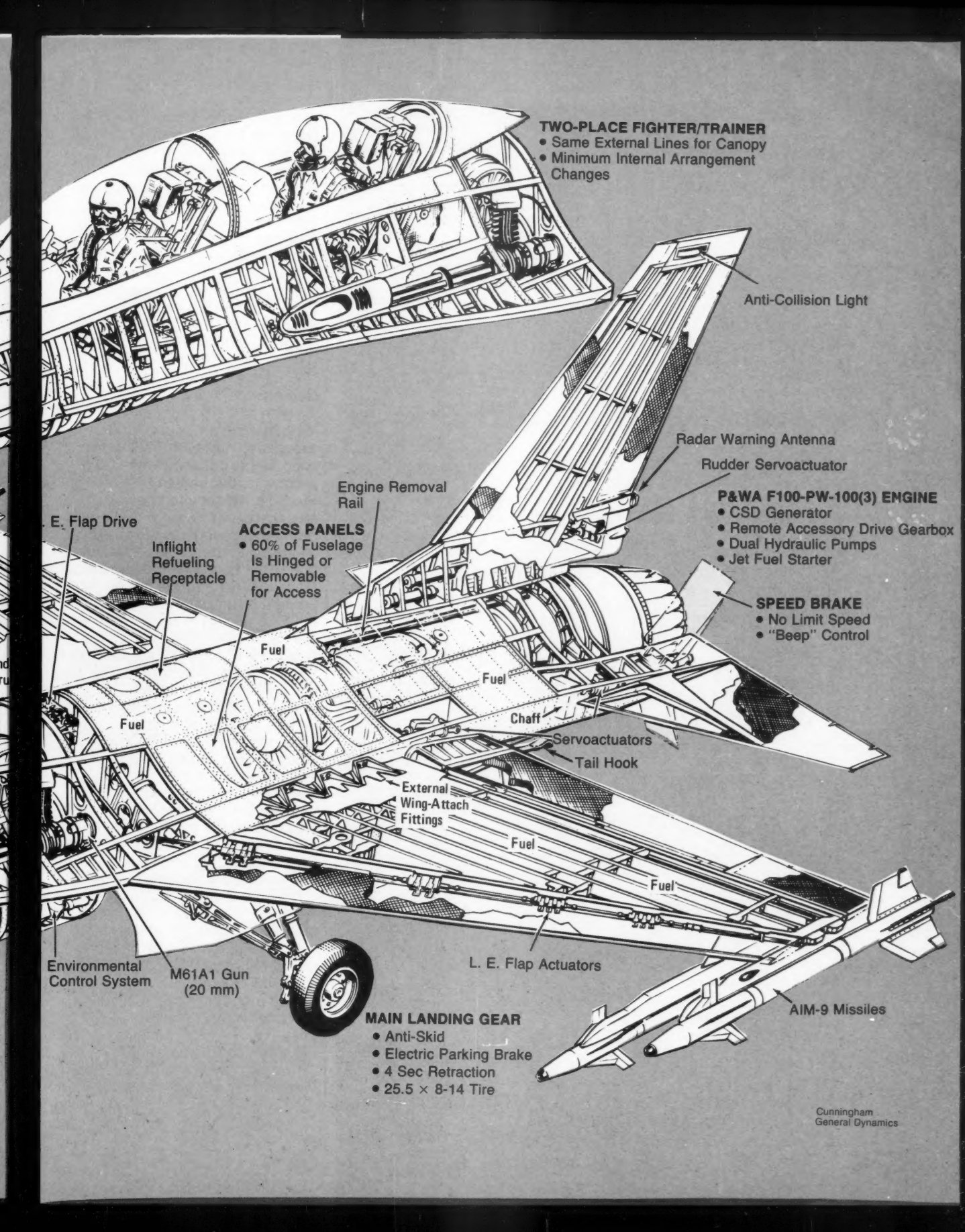
He was admitted to practice law in the Supreme Court of the United States and the highest courts of Kansas, Massachusetts and the District of Columbia.

F-16
FIGHTER AIRCRAFT

F-16B
Two-Place Fighter/Trainer

F-16A
Single-Place Fighter



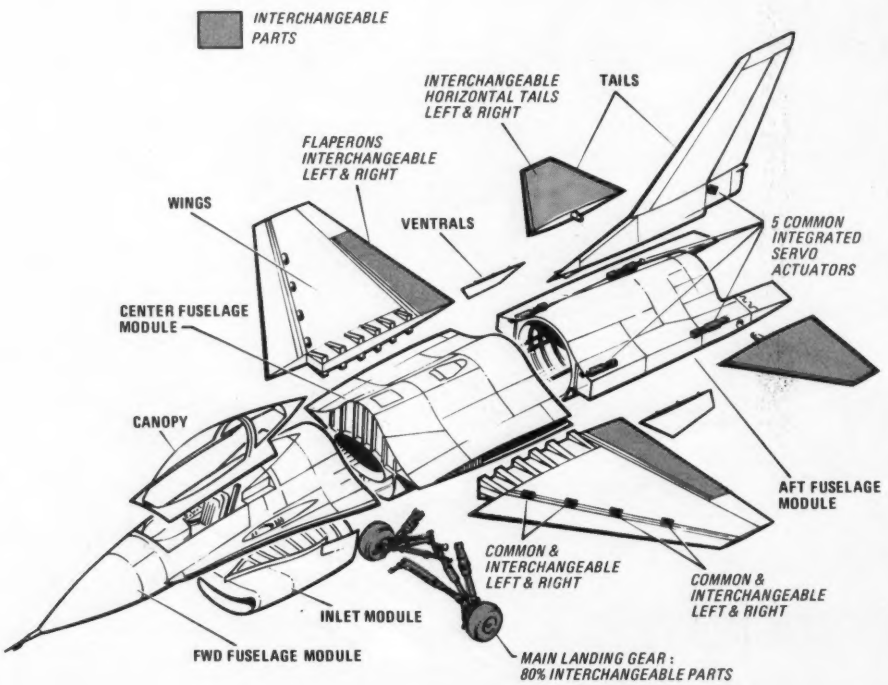

TWO-PLACE FIGHTER/TRAINER
• Same External Lines for Canopy
• Minimum Internal Arrangement Changes
Anti-Collision Light
Radar Warning Antenna
Rudder Servoactuator
P&WA F100-PW-100(3) ENGINE
• CSD Generator
• Remote Accessory Drive Gearbox
• Dual Hydraulic Pumps
• Jet Fuel Starter
SPEED BRAKE
• No Limit Speed
• "Beep" Control
Engine Removal Rail
E. Flap Drive
Inflight Refueling Receptacle
ACCESS PANELS
• 60% of Fuselage Is Hinged or Removable for Access
Fuel
Fuel
Fuel
Fuel
Chaff
Servoactuators
Tail Hook
External Wing-Attach Fittings
Fuel
Fuel
Environmental Control System
M61A1 Gun (20 mm)
L. E. Flap Actuators
AIM-9 Missiles
MAIN LANDING GEAR
• Anti-Skid
• Electric Parking Brake
• 4 Sec Retraction
• 25.5 × 8-14 Tire
Cunningham
General Dynamics

F-16 aircraft will increase the military capabilities of Iran by the mid-1980s. It is estimated that the government of Iran will need approximately 3,000 trained maintenance personnel and 240 pilots to operate and maintain the 160 F-16 aircraft. Sufficient personnel to support the program are available if Iran uses pilots and technicians that are presently supporting other military aircraft but which have to be replaced during the 1980s. It is anticipated that the IIAF will retrain/upgrade these personnel to fill the F-16 program manpower requirements.

At program activation, a facilities survey team and weapon system planning team (total: approximately 15 personnel) will be sent to Iran for approximately three months.

"Perhaps the most tangible threat to Iran concerns the vulnerability of her oil economy. If the flow of Iranian oil to the Western World were significantly reduced owing to military conflict . . . the political and economic impact would be grave."

To support the program in the long term, it is estimated that about 1,000 contractor personnel and four U.S. Government personnel will be required. The contractor technicians' duration will be from two to four years. Plans call for four U.S. Government personnel to serve as liaison for the cooperative logistics program on an indefinite basis. These estimates depend on support decisions to be made in the future by the government of Iran and on the progress of the program.



The proposed sale of F-16 aircraft to the government of Iran will have no adverse operational impact upon U.S. readiness posture or on the USAF F-16 program with the European Participating Governments (Belgium, Denmark, The Netherlands, Norway), providing the Iranian F-16 program is implemented and supported as proposed. However, based on historical experience with similar programs, the Iranian F-16 program will require special management to ensure that early production resources are properly allocated to the United States Air Force, the European Participating Governments and the Iranian Air Force. Fifteen per cent of each of the F-16 aircraft to be sold to Iran will be manufactured by U.S. Allies, the European Participating Governments, in accordance with our agreement with them.

The effect of introducing the F-16 in multiple operating locations simultaneously will place special demands upon the early support arrangements—spares and maintenance. This support is to be supplied by the prime contractor—not the Department of Defense. The contractor states that he can support this program.

Under the proposed program, the government of Iran will provide necessary funding for tooling required to provide additional stocks over and above U.S. Air Force requirements. This added production capacity could be considered a positive contribution to U.S. readiness in the event of an emergency.

I would now like to provide the details on how we propose to

implement the program, assuming a favorable Congressional response and a decision by the government of Iran to proceed with the program. The LOA offers 160 F-16 aircraft and support equipment. Of the total, 136 are the single-seat F-16A and 24 are the two-seat F-16B. The configuration of the aircraft will be the same as that of the U.S. Air Force F-16 with the exception of nonreleasable systems such as nuclear weapons delivery. Capabilities of the aircraft will also be the same as the U.S. Air Force F-16 minus capabilities lost due to deletion of nonreleasable equipment. For example, the Iranian F-16s will not have a nuclear weapon delivery capability.

The first phase of the sale is to provide 10 aircraft for continental U.S. training of Iranian instructor pilots cadre. The aircraft will be located at a U.S. Air Force tactical training location for approximately 17 months. Maintenance support at this location will be provided exclusively by contractor personnel. The current concept indicates a build-up to 129 contractor personnel during this period. This team will be made up of aircraft technicians, systems specialists, administrative and supervisory personnel.

The second phase will provide 160 F-16 aircraft in Iran. (150 operational aircraft plus the 10 training aircraft). The in-country support functions will be performed by a team composed of contractor personnel and the initial Iranian cadre trained in the United States. Functional areas will include organizational, avionics, munitions, and field maintenance in addition to maintenance administration. The approximate number of personnel per skill level area as follows:

F-16 GENERAL ARRANGEMENT

Data

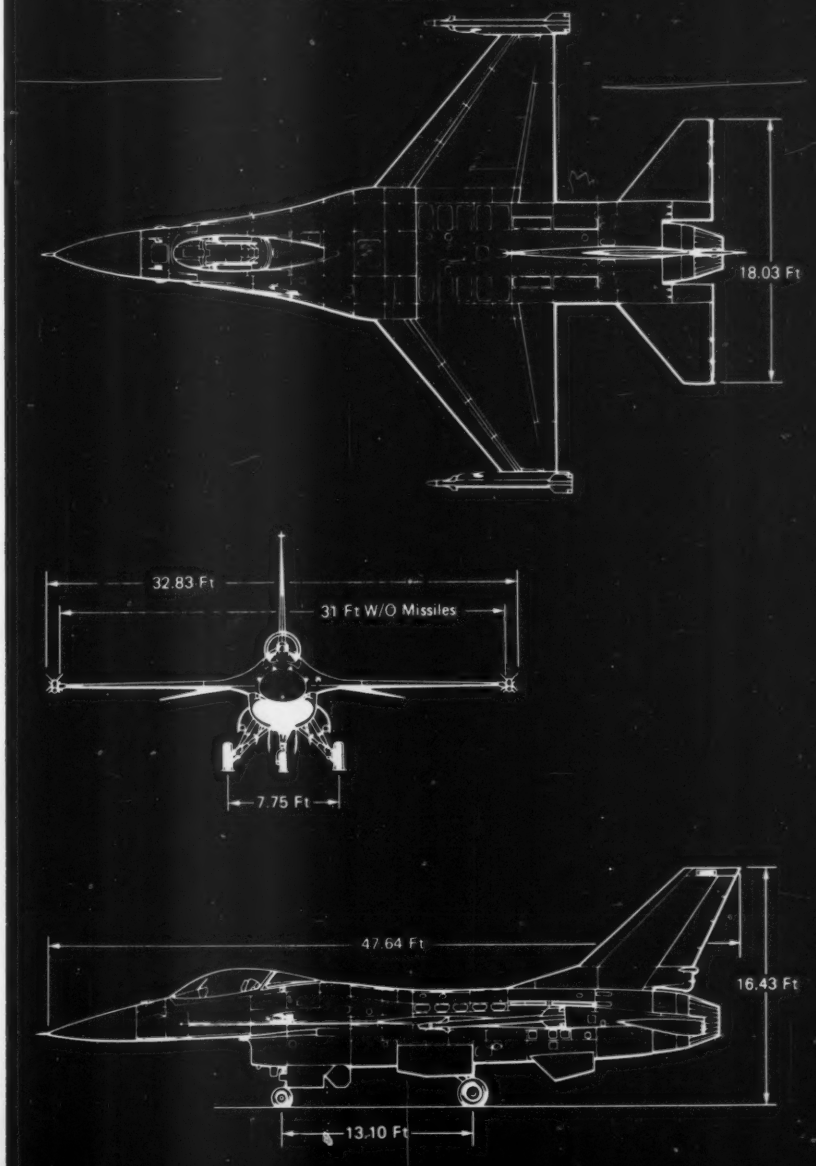
Wing Area ..... 300 Sq Ft
Aspect Ratio 3.0
Leading Edge Sweep ..... 40°

Weights

Design G.W. ..... 22,500 lb
Maximum Takeoff G.W. ..... 33,000 lb
Maximum External Load Capacity ..... 15,200 lb

Engine

Pratt & Whitney F100-PW-100 (3)



AVIONIC CAPABILITY

NAVIGATION/COMMUNICATION

- Inertial navigation for accurate guidance to the target plus TACAN
- Fast action for immediate takeoff (5 min)
- UHF and VHF voice communications

PENETRATION AIDS

- Silent (passive) threat radar warning with action displays
- Selective use of ECM pods
- Chaff/flare dispensers

AIR-TO-AIR COMBAT

- Autonomous or vectored–gun and Sidewinder missiles
- All-weather search, angle and range track
- Look-down/detect and acquire in clutter
- Energy management cues
- All-weather weapon delivery (growth)

AIR-TO-GROUND ATTACK

- Visual air-to-ground computed ballistics
  - Bombs
  - Guided bombs/missiles
  - Rockets
  - Gun
- Blind weapon delivery
  - Ground offset beacon
  - Pave Penny assist
  - Radar ground map

1,000 apprentice level personnel, 1,400 journeyman level personnel and 400 supervisor level personnel, for a total of about 2,800 people.

The F-16 should be significantly easier to absorb by Iran because it is relatively simple to maintain and operate.

The design-to-cost concept under which the F-16 was developed resulted in a much less complex airplane that its predecessors in Iran, the F-4 and F-14. The F-16 requires only one crewman compared to two crew members required by the F-14 and F-4. The maintenance manhours per flight for the F-16 are expected to be one-third to one-half those required to maintain the F-14 and F-4. Built-in test capability and automatic test equipment also replace skilled technicians.

The Air Force foresees no adverse impact on current aircraft procurement/production schedules provided the program is implemented and supported as proposed. The sale should have a favorable impact on the U.S. Air Force program since the purchase of these F-16 aircraft by the government of Iran should reduce our unit cost per aircraft and will provide a pro rata share recoupment of research and development costs.

Various reports have indicated the concern of Congress over military acquisitions by Iran. The F-16 sale to Iran will receive close management support and control in the Department of Defense. Over the past year our management of activities in Iran has improved. The Department of Defense will stay on top of the F-16 program in every respect.

In summary, I believe the F-16 program for Iran is structured to take into account the threat, their future fighter requirements and logical delivery schedule without an adverse effect on U.S. Air Force and NATO Consortium programs. The government of Iran was briefed by the DoD in early September on total program requirements and recognizes the increased program risk and costs associated with the early availability of the aircraft.

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